

New BMPs and Standards: Ideas for Implementation

Angela Force, Strategic Projects Manager

February 23, 2022

CSGP - Comments Received

Compiled Comments for Construction General Permits

Comments received from:

American Electric Power (AEP)

Associated General Contractors of Indiana (AGCI)

Cheyenne Hoffa (CH)

City of Chesterton (COC)

City of Fort Wayne (FW)

City of Goshen (COG)

City of Indianapolis (COI)

Colby King (CK)

Deborah Hughes (DH)

Earth Works (EW)

Elkhart City (EC)

Indiana Association for Floodplain and Stormwater Management (INAFSM)

Indiana Builders Association (IBA)

Indiana Department of Transportation (INDOT)

Indiana Ready Mixed Concrete Association (IRMCA)

Jon Gotz (JG)

Lennar (Lennar)

Marc Walters (MW)

Mike Conquest (MC)

Moretz (Moretz)

Porter County (PC)

Pulte Group (Pulte)

Sherri Wilson (SW)

Southwestern Indiana Builders Association (SIBA)



IDEM Response to CSGP Comments

2.1 Permit Coverage

Comment: The meaning of the last sentence, “Municipal Separate Storm Sewer System (MS4) stormwater ordinances will be considered to have the same authority as this permit,” is not clear. MS4 permits normally go through a hearing and public comment period where the regulated community has an opportunity to revise and comment on draft regulations. Does this sentence grant an MS4 any different authority than what they already have? Does the Construction General Permit (CGP) become incorporated into the MS4 permit or vice versa? The statement that the MS4 stormwater ordinances will be considered to have the same authority as this permit should either be clarified as to its intent or removed from the Draft CGP (Lennar)

Response:

This permit applies to all projects that meet the requirements in Section 2.1. Projects that occur in a designated municipal separate storm sewer system (MS4) jurisdictional area and are regulated by the MS4 entity must also comply with all appropriate MS4 ordinances and regulations related to stormwater discharges. The local MS4s will be required to update their local ordinances to at least meet the minimum requirements of the Construction Stormwater General Permit (CSGP). IDEM has modified the language in the CSGP and removed “Municipal Separate Storm Sewer System (MS4) stormwater ordinances will be considered to have the same authority as this permit,”

Rule 5: 2018 Tippecanoe Partnership Training Slide

WRITTEN

RESPONSIBILITY

INSPECT

RISKS

ACTION

Contractors NEED a Corporate Strategy

327-IAC-15-5-7: The SWPPP shall serve as a guideline but should not be interpreted to be the only basis for implementation of stormwater measures for a site. The project site owner is responsible for implementing all measures necessary to prevent polluted stormwater runoff.

Contractors: Assign Responsibility

- EHS staff
- Contractual assistance
- MS4 communications and localized training
- Industry associations



Contractors: Take Credit For Current Efforts

- Communicate corporate and industry initiatives
- Show off your stickers, fact sheets and technology
- EHS trainings , toolbox talks, newsletters, blogs, websites, intranet



All ready mix drivers are required to wash out into a suitable washout container or pit as defined by the Indiana Department of Environmental Management (IDEM).



Washout containers and their maintenance are the responsibility of the developer or contractor performing the work.



All ready mix drivers are responsible for determining if the washout container or pit is suitable to washout into.

Contractors: Start a Contractual Discussion – Largest Clients

- Low bid work
- Bid fairly
- Clear responsibilities
- Documentation deliverables



MS4s: Short - Term

- Public Notice: website posting
- New inspection forms
- Notification to permittees
- Plan review process
- Connect with your 3rd party consultants and colleagues (plan review, inspection services, MS4 reporting)

Local Public Agency Programs

Welcome to GovDelivery - INDOT Local Public Agency

In this publication, you will find information on the following topics related to Local Public Agencies and federal aid:

- **Construction Stormwater General Permit “Continuation of Coverage” Responsibilities**

Construction Stormwater General Permit “Continuation of Coverage” Responsibilities

Effective **December 19th, 2021**, Indiana Department of Environmental Management (IDEM) repealed the Rule 5 (327 IAC 15-5) permit. It has been replaced with the Construction Stormwater General Permit (CSGP). IDEM sent out an email notification to each Stormwater Const Consultant, Stormwater Const Application Preparer and Applicant/Site Owner to apply for “Continuation of Coverage” under the CSGP.

Local Public Agency (LPA) contracts with a Rule 5 will need to apply for continuation of coverage to ensure conformance with the new CSGP. The email generated by IDEM’s ePortal/nVIRO has instructions on how to apply for “Continuation of Coverage” under the CSGP.

Questions regarding new CSGP requirements, “Continuation of Coverage” process and the use of the IDEM ePortal/nVIRO shall be directed to stormwat@idem.in.gov or by calling (800)451-6027 ext. 1864.

MS4s: Short - Term

- Contractor or permittee should lead pre-construction meeting
- Discuss sensitive areas, ponds, trenches, pits, buffers
- Review the mass earthwork schedule



MS4 General Permit and CSGP- Inspections

- MS4 GP Section 4.5 (3)(d)(a):
Inspect every private project at the start; larger projects and priority sites inspected twice per year
- Greater than 5 acres = larger sites
- Sensitive resources = priority
- CSGP: Section 3.6 (a)(2)(E): Self-monitoring: documentation of an actual discharge that is visible



Photo 1

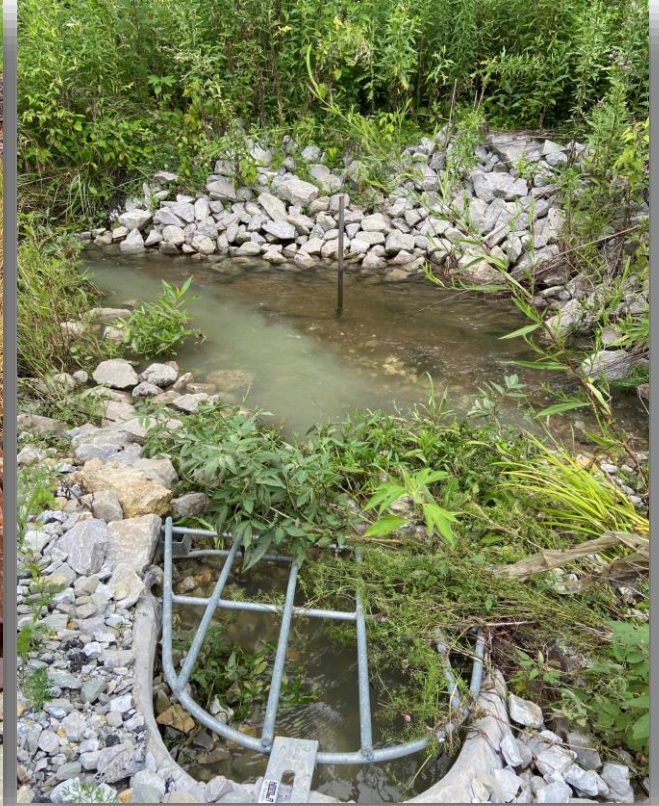
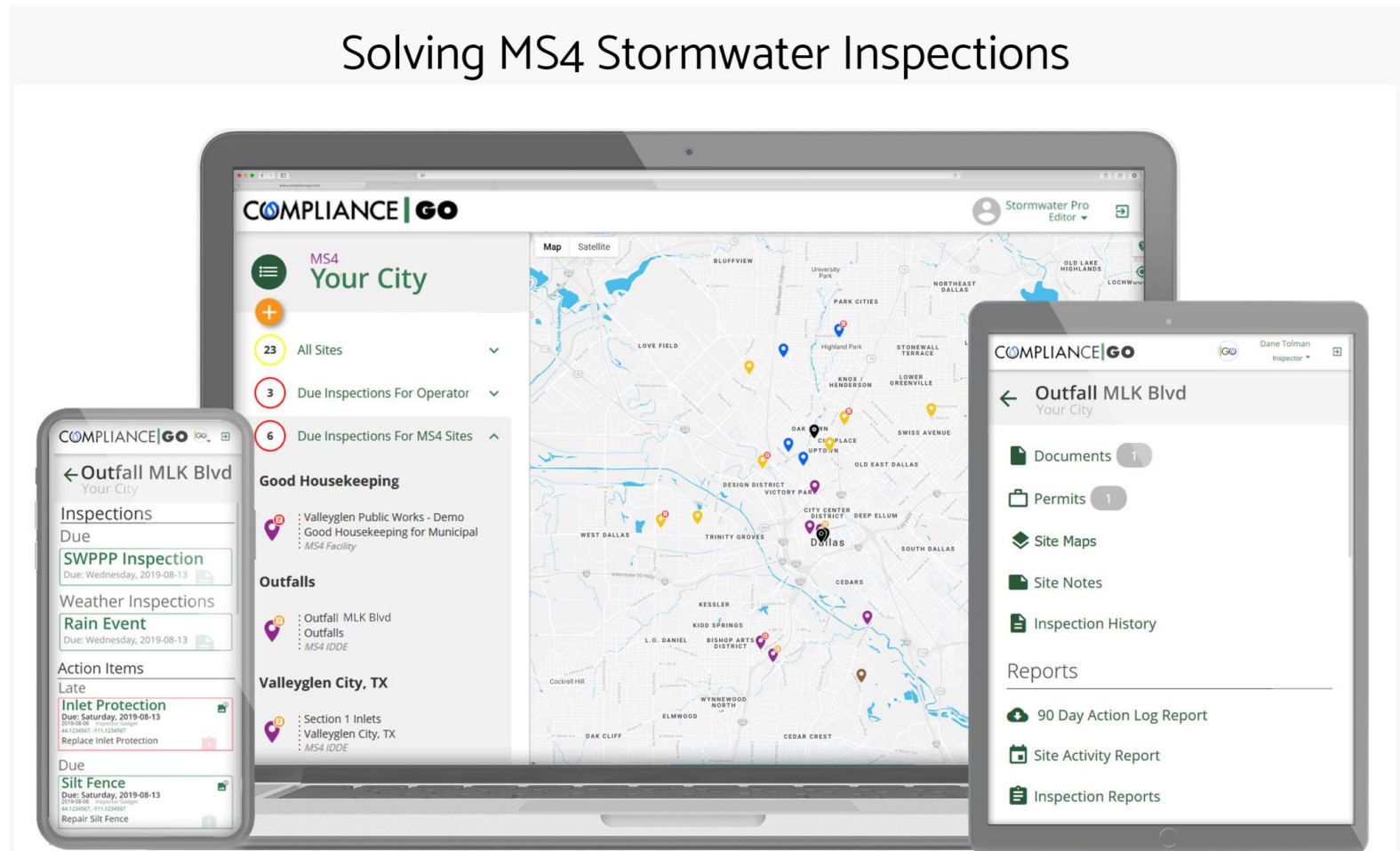


Photo 2

MS4s: Start the Deep Dive

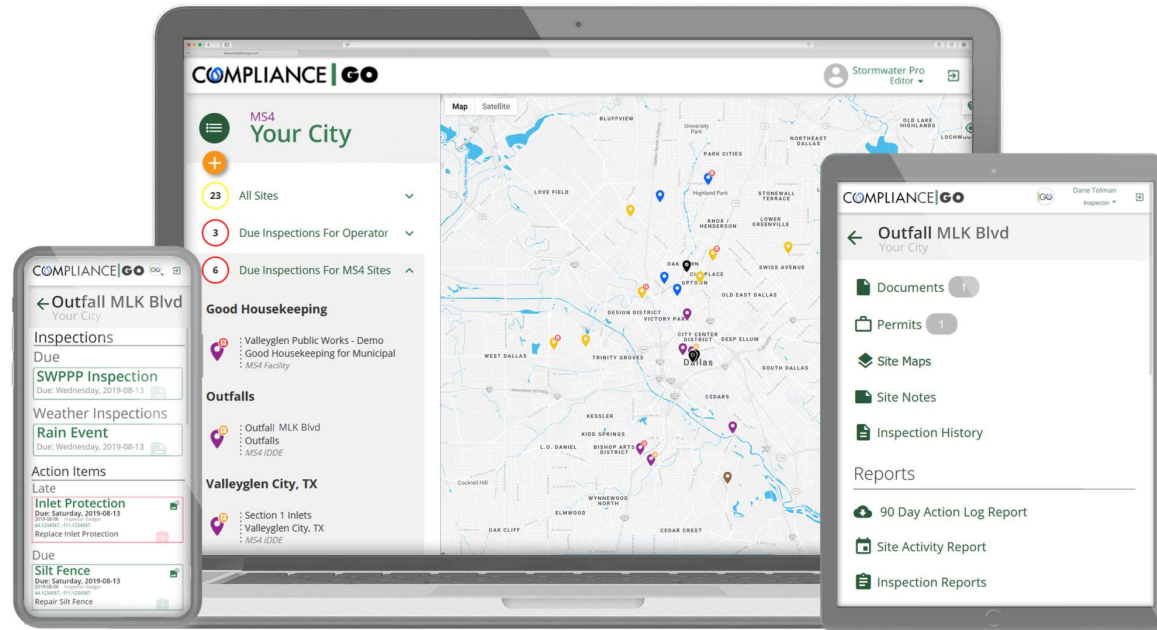
- Ordinance and Technical Standards
- Inspection regime
- Use of Technology

Solving MS4 Stormwater Inspections



MS4s: Technology

Solving MS4 Stormwater Inspections



Toll free number: 1-866-847-3401

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Product Highlights

Stormpromax is a stormwater management solution for NPDES Compliance Tracking.

Our software is designed to provide Development, Construction and Design Professionals an easy, web based and cost-effective method for tracking National Pollutant Discharge Elimination System (NPDES) permits and their requirements. Below are a few of Stormpromax's compliance solutions.

Fieldpro is our portable solution.

Take all of your valuable information with you; documents, photographs, permits and other necessary information.

[click here](#)

Industry Applications

Stormpromax is a complete compliance tracking solution.


We provide you and your organization with peace of mind knowing you're ahead of the competition when it comes to compliance risks.

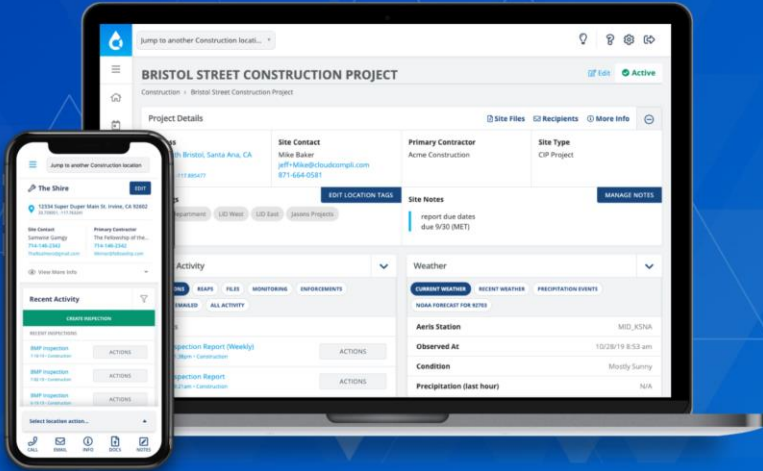
A few examples of industries that [Stormpromax](#) supports:

Commercial Development	BMP Inspectors & Installers
Home Building	Engineers
Oil, Gas & Energy Operators	Consent Decree compliance
Roadway/DOT Contractors	Tenant Airport Compliance

[click here](#)

MS4s: Technology


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Streamline stormwater compliance with our cloud-based software platform that harnesses digital inspections, issue management, analytics, and weather tracking to provide actionable insights and visibility into your program.

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PermiTrack Product Suite

Stormwater (MS4). Erosion Control (ESC). Air Quality (ENV). Geographic Information Systems (GIS).


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Project Management for Municipal Storm Sewer Permits (MS4)

With PermiTrack_{MS4} you can easily administer your program, maintain and centralize records and file annual reports to meet NPDES storm water permit regulations.


[More »](#)



Project and Inspection Management for Erosion Control (ESC)

PermiTrack_{ESC} allows you or your staff in any location to load and view erosion/sediment control permit information.

[More »](#)



Facility, Asset and Emissions Management for VOCs, HAPs and other emissions (ENV)

PermiTrack_{ENV} allows to track data and run reports across facilities, by asset, process, sources, equipment, substances, SCC and more.

[More »](#)

Communication is the Key

- Talk with IDEM, MS4, permittees, contractors and vendors
- Learn their language and ask questions
- Be patient
- Solicit help, even when it takes more time
- Show you aim to comply



New Standards



MENU



Indiana Department of Environmental Management

Construction /
Land Disturbance
PermittingIndustrial Storm
Water PermittingOther Applicable
Permits

Contact



SEARCH

Industrial Stormwater:

Currently this program is administered through 327 IAC 15-6.

IDEM is at Step (1) as listed above and is developing a draft permit.

Indiana Stormwater Quality Manual – Draft Stormwater Quality Measures

In developing the new permit U.S EPA has required Indiana to incorporate several new requirements into the permit. These requirements have resulted in the modification of several measures in the current Indiana Stormwater Quality Manual. Draft of these measures are below. Comments on these measures may be [directed to the Stormwater Program via email using the program email account](#). When sending comments mark the subject line as Stormwater Manual.

- [708.02 Temporary Sediment Basin \[PDF\]](#)
- [708.03 Floating Outlet \[PDF\]](#)
- [708.04 Perforated Riser Outlet \[PDF\]](#)
- [708.05 Rock Horseshoe \[PDF\]](#)
- [708.06 Baffles \[PDF\]](#)
- [709.06 Rock Berm \[PDF\]](#)
- [710.03 Concrete and Cementitious Washwater Management \[PDF\]](#)
- [713.01 Pump Filter Bags \[PDF\]](#)

Dewatering Challenge

- Approved plans lack dewatering details
- Unknown quality of receiving water
- After the fact BMPs are expensive
- Unknown long-term damage and cost to the resource
- Engineers to be more considerate of means and methods

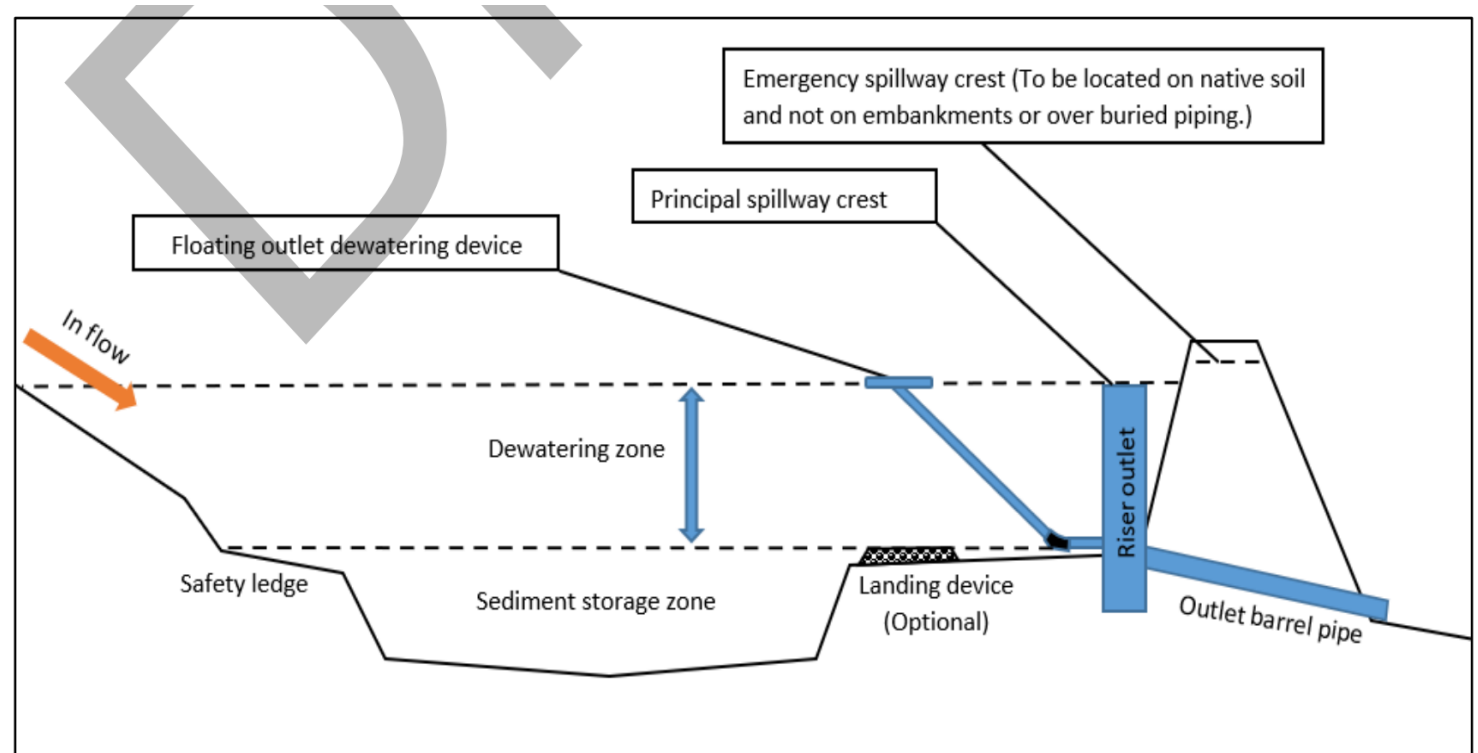






New Standards: Temporary Sediment Basin

- Retain water 48-72 hours
- Floating outlet
- Often used with permanent features (ponds)
- Standard requires converting temporary to permanent feature within the construction sequence



New Standards: Floating Outlet

- Can be implemented with permanent structure
- Manufactured vs. contractor assembled
- Stabilize contributing watershed before removal
- Include in self-monitoring inspections

708.03 Floating Outlet – “Skimmer” (Dewatering Device)

EXHIBIT 708.03-E

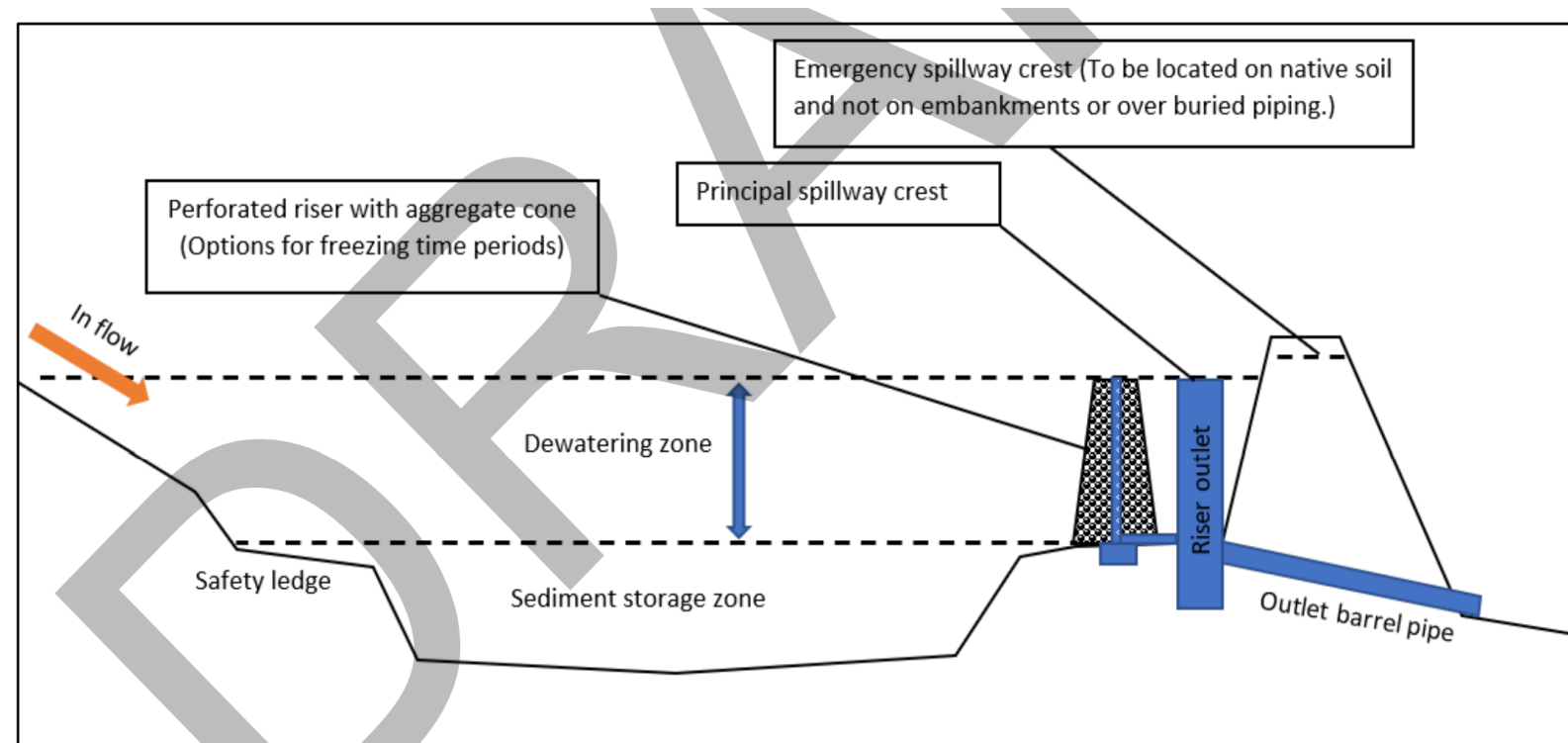
CONSTRUCTION OF THE CONTRACTOR ASSEMBLED FLOATING OUTLET

Construction Notes (see Exhibits 708.03-F and G):

- (1) Flotation section shall be solvent welded to ensure an airtight assembly. Contractor to conduct a test to check for leaks prior to installation. Attaching the perforated outlet pipe to the flotation section will be done in a manner that will not compromise the airtight qualities of the flotation section.
- (2) The attachment bands between the flotation section and the perforated inlet section must allow movement to ensure the flotation section can remain level with the water surface for proper inlet function and to minimize clogging from floating debris.
- (3) Perforated inlet section shall have adequate opening such as 12 rows of ½ inch diameter holes, 1¼ inch on center. To achieve this spacing each row of holes should be offset from the row above and below.
- (4) Boom length: 4-foot-long minimum or by design however longer booms result in less bending damage or wear to the flexible boom connector.
- (5) Flexible pipe: Corrugated non perforated plastic tubing or flexible rubber hose. Secure watertight connectors are required from the discharge outlet to the boom piping.
- (6) Orifice: Install orifice as shown in construction drawings.

New Standards: Perforated Riser

- If withdrawal from the surface of the water column is not feasible
- Holes, wire mesh and stone cone, anchor in concrete, trash guard



New Standards: Rock Horseshoe

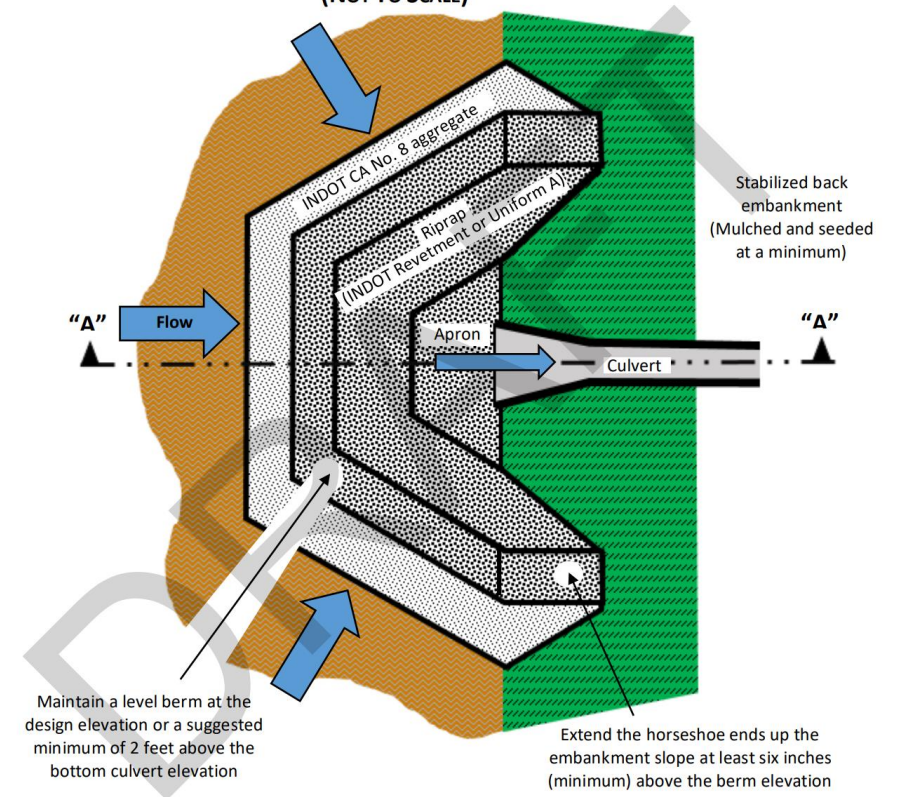
- 5 acres max drainage area
- Culvert, pipe, inlet protection, dewatering of sediment basin
- Extend aggregate upslope

708.05 Rock Horseshoe

Exhibit 708.05-G

TEMPORARY ROCK HORSESHOE CULVERT, PIPE, INLET PROTECTION TYPICAL PRACTICE DIAGRAM

PLAN VIEW
(NOT TO SCALE)



New Standards: Baffles

- Temporary sediment traps
- Porous vs. nonporous
- Detailed specs and installation to be included in the SWPPP



New Standards: Concrete Washout

- Install signage identifying the location
- Provide maximum fill level indicators to note capacity should not exceed 75%
- When a CWO unit is at capacity, identify with a “closed” sign
- No spillage of wash water shall occur from the transport of the unit
- Highly variable: use 20-40 gallons per ready mix truckload
- If concrete pump trucks are anticipated, use 50 gallons of wash water as an estimate



New Standards: Concrete Washout

VINYL-CON™

FILTER BAGS



Place the empty filter bag inside the Vinyl-Con.

About 35+ concrete trucks can washout in one Filter Bag.



Once full, lift the filter bag with its attached lifting straps rated for up to 2,500 lbs. Dispose of the hardened concrete while leaving the water contained in the Vinyl-Con. Place another bag inside the Vinyl-Con and start the process again.



You will washout about 120+ concrete trucks into three filter bags before the Vinyl-Con is full of water.

The Vinyl-Con is reusable after the fourth filter bag is used to dispose of the Aqua-Solution.



\$40.00

6'x6' Rainfly

For All-Weather
and Corrugated Washouts

Part No: 950-12306AW-Top



New Standards: Pump Filter Bag

- Dewatering details in the SWPPP
- Pump/hose size must match bag dimensions
- Replace bag regularly
- Not all hoses need a bag
- Focus on discharge and conveyance
- New NOI – dewatering check box

STANDARD AVAILABLE SIZES

- 10' X 15' for 2" discharge hose
- 20' X 15' for 3" discharge hose
- 25' X 15' for 4" discharge hose
- 35' X 15' for 6" discharge hose



Construction Stormwater General Permit – Polymer

Section 3.5 (a) Special Provision - Polymer: The use of anionic polymers on the project site are authorized for sediment control provided their use is in conformance with current State of Indiana standards and specifications.



Invest in Relationships

- COVID challenges
- Positive compliance attitude
- Personnel on the move
- Change is constant
- Make time for conversation



Future Forecast

- More deliverables for permittees
- New technological tools
- Tougher fees, fines and penalties
- Greater compliance awareness



Questions?

Angela Force, CPMSM, CESSWI
Strategic Projects Manager
aforce@cbbel.com

Christopher B. Burke Engineering, LLC
www.cbbel-in.com
317-266-8000